UNITED STATES PATENT AND TRADEMARK OFFICE

M(W)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,663	04/05/2000	Roland Lamer	15-IS-5288(70191/235)	7305

7590	03/08/2004

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EXAMINER
FRENEL, VANEL

ART UNIT	PAPER NUMBER
3626	

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- Th MAILING DATE of this communication appears on the cov r sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2003* .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 19-31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 19-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) ☐ Other: .

DETAILED ACTION

Notice to Applicant

1.   This communication is in response to the amendment filed 12/12/03. Claims 1-

11, and 19-31 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or

described as set forth in section 102 of this title, if the differences between the subject

matter sought to be patented and the prior art are such that the subject matter as a

whole would have been obvious at the time the invention was made to a person having

ordinary skill in the art to which said subject matter pertains. Patentability shall not be

negatived by the manner in which the invention was made.

3.   Claims 1-11 and 19-31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wong et al (6,260,021) in view of Mukherjee (6,314,415).

(A)   As per claim 1, Wong discloses a data management system for patient data,

comprising:

        a first component having a functionality code segment and a user interface code

segment (Col.8, lines 65-67 to Col.9, line 21);

a second component having a functionality code segment and a user interface

code segment (Col.8, lines 65-67 to Col.9, line 21);

and a container application having a first user interface layer in communication with the

first component and a second user interface layer in communication with the second

component (Col.6, lines 1-55).

Wong does not explicitly disclose wherein the first and second user interface

layers are configured to convert the first user interface code segment of the first

component and the second user interface code segment of the second component to a

uniform user interface and to communicate patient data between the functionality code

segments of the first and second components, respectively, and the uniform user

interface.

However, this feature is known in the art, as evidenced by Mukherjee. In

particular, Mukherjee teaches the first and second user interface layers are configured

to convert the first user interface code segment of the first component and the second

user interface code segment of the second component to a uniform user interface and

to communicate patient data between the functionality code segments of the first and

second components, respectively, and the uniform user interface (See Mukherjee,

Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of

the invention to have included the feature of Mukherjee within the system of Wong

with the motivation of providing features that facilitate data entry, avoid redundant

and unnecessary information from graphical user interfaces, and permit changes to

the user interfaces (and resulting forms) without relying on "hardcoded" software

(See Mukherjee, Col.2, lines 19-24).

(B)   As per claim 2, Wong discloses the data management system wherein the

functionality code segment of the first component is configured to store and retrieve

patient image data (Col.10, lines 13-27).

(C)   As per claim 3, Wong discloses the data management system wherein the

functionality code segment of the second component is configured to store and retrieve

patient text data (Col.1, lines 52-59).

(D)   As per claim 4, Wong discloses the data management system wherein the first

and second user interface layers are configured to format the patient data from the

first and second functionality code segments with the same look and feel (Col.3, lines

31-60).

(E)   As per claim 5, Wong discloses the data management system, the container

further comprising a first service layer in communication with the first component and a

second service layer in communication with the second component, wherein the first

and second service layers are configured to communicate data between the

functionality code segments of the first and second components and a service (Col.12,

lines 65-67 to Col.13, line 59).

(F)   As per claim 6, Mukherjee discloses the data management system wherein the

service includes a telecommunication service (See Mukherjee, Col.6, lines 55-67).

(G)   As per claim 7, Wong discloses a data management system for patient data,

comprising: a first application for retrieving patient image data from a database and

having a first user interface (Col.10, lines 13-47);

        a second application for processing patient text data and having a second user

interface (Col.7, lines 1-58); and

    Wong does not explicitly disclose a data manager in communication with the first and

second applications, wherein the data manager includes a user interface code segment

in communication with the first and second applications for converting the first user

interface and the second user interface to a uniform user interface and for receiving the

patient image data and patient text data for generating display signals based on the

patient image data and the patient text data according to a predetermined display

format.

However, this feature is known in the art, as evidenced by Mukherjee. In particular,

Mukherjee teaches a data manager in communication with the first and second

applications, wherein the data manager includes a user interface code segment in

communication with the first and second applications for converting the first user

interface and the second user interface to a uniform user interface and for receiving the

patient image data and patient text data for generating display signals based on the

patient image data and the patient text data according to a predetermined display

format (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to have included the feature of Mukherjee within the system of Wong with the

motivation of providing features that facilitate data entry, avoid redundant and

unnecessary information from graphical user interfaces, and permit changes to the user

interfaces (and resulting forms) without relying on "hardcoded" software (See

Mukherjee, Col.2, lines 19-24).

(H)   As per claim 8, Wong discloses the data management system further comprising

a display unit configured to receive the display signals and provide a display based on

the display signals (Col.7, lines 29-37).

(I)   As per claim 9, Wong discloses the data management system wherein the

predetermined display format has a look and feel for both the patient image data and

the patient text data (Col.11, lines 17-64).

(J)   As per claim 10, Wong discloses the data management system further comprising

a third application configured to process data, the user interface code a

segment in communication with the third application and configured to

receive the data and to generate display signals based on the data (Col.13, lines 2-

44).

(K)   As per claim 11, Wong discloses the data management system wherein the third

application is in communication with the internet (Col.8, lines 53-67 to Col.9, line 21).

(L)   As per claim 19, Wong discloses a data management system for patient data,

comprising:

        first means for processing patient image data, the first means having a first user

interface means (Col.10, lines 13-67 to Col.11, line 48);

        second means for processing patient text data, the second means having a

second user interface means (Col.11, lines 17-64; Col.14, lines 1-42). Wong does not

explicitly disclose third means for communicating between the first and second means,

for converting the first user interface means and the second user interface means to a

uniform user interface and for displaying the patient image data and patient text data

according to a predetermined display format.

        However, this feature is known in the art, as evidenced by Mukherjee. In

particular, Mukherjee suggests third means for communicating between the first and

second means, for converting the first user interface means and the second user

interface means to a uniform user interface and for displaying the patient image data

and patient text data according to a predetermined display format (See Mukherjee,

Col.11, lines 37-67 to Col.12, line 67).

        It would have been obvious to one of ordinary skill in the art at the time of the

invention to have included the feature of Mukherjee within the system of Wong with the

motivation of providing features that facilitate data entry, avoid redundant and

unnecessary information from graphical user interfaces, and permit changes to the user

interfaces (and resulting forms) without relying on "hardcoded" software (See

Mukherjee, Col.2, lines 19-24).

(M)   As per claim 20, Wong discloses the data management system wherein the first

means includes a PACS component (Col.1, lines 21-37).

(N)   As per claim 21, Wong discloses the data management system wherein the first

        means includes a user interface code segment, and the third means a

        includes a user interface layer in communication with the user interface code

segment (Col.13, lines 1-44).

(O)   As per claim 22, Wong discloses a method of displaying patient data from a

plurality of applications, comprising: receiving patient image data using a first

application having a first user interface (Col.11, lines 4-48);

receiving patient text data using a second application having a second user interface

(Col.7, lines 1-58); converting the first user interface and the second user interface to a

uniform user interface (See, Wong, Col.12, lines 6-62).

        Wong does not explicitly disclose configuring both the patient image data and

patient text data according to a predetermined display format; and displaying the

configured patient image data and patient text data.

However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee suggests configuring both the patient image data and patient text data according to a predetermined display format; and displaying the configured patient image data and patient text data (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and unnecessary information from graphical user interfaces, and permit changes to the user interfaces (and resulting forms) without relying on "hardcoded" software (See Mukherjee, Col.2, lines 19-24).

(P)   As per claim 23, Wong discloses the method further comprising receiving the patient image data from a PACS database (Col.1, lines 21-38).

(Q)   As per claim 24, Mukherjee discloses the method wherein the predetermined display format includes a display format for an icon (See Mukherjee, Col.5, lines 30-67 to Col.6, line 54).

(R)   As per claim 25, Mukherjee discloses the method wherein the predetermined display format includes a display format for a menu (Col.7, lines 15-67 to Col.8, line52).

(S)   As per claim 26, Wong discloses the method further comprising communicating the patient image data through a user interface layer (Col.1, lines 65-67 to Col.2, line 37).

(T)   As per claim 27, Wong discloses the method further comprising providing patient image data to one of the internet and an intranet (Col.6, lines 44-55).

(U)   As per claim 28, Wong discloses the data management system further comprising a third component having a functionality code segment and a third user interface code segment, wherein the container application is configured to communicate patient between the functionality code segments of the first, second and third components, respectively, and the uniform user interface (Col.8, lines 15-67).

(V)   As per claim 29, Wong discloses the data management system wherein the functionality code segment of the third component is configured to communicate with the Internet (Col.6, lines 44-55).

(W)   As per claim 30, Wong discloses the data management system wherein the service communications with the first and second service layers via a predetermined protocol (Col.8, lines 31-67).

(X)   As per claim 31, Wong discloses the data management system wherein the

predetermined protocol includes componentware (Col.8, lines 53-67).

Response to Arguments

5.   Applicant's arguments filed on 12/12/03 with respect to claims 1-11, 19-31 have

been fully considered but they are not persuasive.

Applicant's arguments filed 12/12/03 have been fully considered but they are not

persuasive. Applicant's arguments will be addressed hereinbelow in the order in which

they appear in the response filed 12/12/03.

(A)   At pages 7-12 of the 12/12/03 response, Applicant argues the followings:

(a) Wong does not disclose, teach or suggest converting a first user interface of a

first component or application and a second user interface of a second component or

application into a uniform user interface.

(b) Neither Wong nor Mukherjee, in combination or alone, discloses teaches or

suggests converting a first user interface of a first component or application and a

second user interface of a second component or application into a uniform user

interface.

(B)   With respect to Applicant's first argument, Examiner respectfully suggests that

Wong discloses "Generally, the system includes one of more interface engines, for

providing image objects with uniform structure regardless of the type of existing system

on which they are stored, and image server middleware, for managing the distribution of

image objects. The system also includes a security object server, for authorizing user

access to the image distribution system and to particular objects, a personalization

object server, for providing user interface preferences and client workstation

capabilities, and a web server, for downloading initial access pages and user interface

components. The system implements a method for medical image distribution according

to which image data stored in existing picture storage systems is first converted into a

uniformly structured image objects before being composed for downloading to client

workstations for user viewing. The system and method of this invention are easily

extensible both for added function and for added performance. The system and method

of this invention are preferably implemented according to CORBA standards. In a first

embodiment, this invention includes a medical image distribution system for distributing

medical images from one or more existing storage systems to a plurality of network-

attached client workstations, said medical image distribution system comprising one or

more computer systems, and wherein each said network-attached client workstation is

configured with an object-oriented graphical interface for receiving medical image

requests from a user and for displaying medical image objects to the user; and wherein

said one or more computer systems are configured with one or more interface engines,

each said interface engine for retrieving medical image data from one or more existing

storage systems and for presenting retrieved medical image data as medical image

objects with a uniform object-oriented structure, and one or more image object

coordinators for receiving medical image requests transmitted from one of said

graphical interfaces, for obtaining medical image objects in said uniform object-oriented

structure from said one or more interface engines, for composing said medical image

objects for display by said graphical interface, and for transmitting said composed

medical image objects to the requesting graphical interface" which correspond to

Applicant's claimed feature (See Wong, Col.3, lines 41-67 to Col.4, line 15). Therefore,

Applicant's argument is not persuasive.

(C)   With respect to Applicant's second argument, Examiner respectfully submits the

test for obviousness is not whether the features of a secondary reference may be bodily

incorporated into the structure of the primary reference; nor is it that the claimed

invention must be expressly suggested in any one or all of the references. Rather, the

test is what the combined teachings of the references would have suggested to those of

ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The issue of obviousness is not determined by what the references expressly

state but by what they would reasonably suggest to one of ordinary skill in the art, as

supported by decisions in In re DeLisle 406 Fed.1326, 160 USPQ 806, In re Kell, Terry

and Davies 208 USPQ 871; and In re Fine, 837 F. 2d 1071, 1074, 5 USPQ 2d 1596,

1598 (Fed. Cir.1988) citing In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 Fed.

Cir. 1988)). Further, it was determined in In re Lamberti et al, 192 USPQ 278 (CCPA)

that :

(i) obviousness does not require absolute predictability;

(ii) non-preferred embodiments of prior art must also be considered; and

(iii) the question is not express teaching of references, but what they would

suggest.

In response, all of the limitations which Applicant disputes as missing in the

applied references, including the features newly added in the 12/12/03 amendment,

have been fully addressed by the Examiner as either being fully disclosed or obvious in

view of the collective teachings of Wong and/or Mukherjee, based on the logic and

sound scientific reasoning of one ordinarily skilled in the art at the time of the invention,

as detailed in the remarks and explanations given in the preceding sections of the

present Office Action (Paper number 12). One cannot show nonobviousness by

attacking references individually where the rejections are based on combinations of

references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck &*

Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, the test for obviousness is not whether the features of a secondary

reference may be bodily incorporated into the structure of the primary reference; nor is it

that the claimed invention must be expressly suggested in any one or all of the

references. Rather, the test is what the combined teachings of the references would

have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981).

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. The cited but not applied art teaches medical diagnostic report

forming apparatus capable of attaching image data on report (5,581,460) and image

data management system particularly for use in a hospital (5,586,262).

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952.

The examiner can normally be reached on 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Thomas can be reached on 703-305-9588. The fax phone

numbers for the organization where this application or proceeding is assigned are 703-

305-7687 for regular communications and 703-305-7687 for After Final

communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-308-

1113.

9.   Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as
follows:

> Mail Stop ____
> Commissioner for Patents
> P.O. Box 1450
> Alexandria, VA 22313-1450

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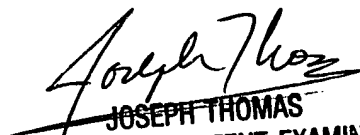
OR faxed to:

(703) 305-7687   (Official Communications; including
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                    "Box AF")

(703) 746-6065   (Informal / Draft Communications, labeled
                    "PROPOSED" or " DRAFT")

Hand-delivered responses should be brought to:

Crystal Park 5, 2451 Crystal Drive,
Arlington, VA. 22202, 7th Floor (Receptionist).

V.F
March 5, 2004

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